



PRODUCT OVERVIEW

DC Output Voltage	27.2 VDC
Output Amperage	40 Amps
Input Voltage Range	108-264 VAC
Power Factor	>90%

APPLICATION

Operation of 24VDC systems and accessories.

DESCRIPTION

The **DLS-UI-27-40** is a Power Factor Corrected Power Supply/Battery Charger that converts 120 to 240 volts A.C. to 27.2 volts D.C. As a power supply, tightly controlled regulation allows the user to operate any 24 volt nominal D.C. load up to the unit's rated output current. As a battery charger, the unit will maintain the battery, delivering full-rated current when the battery capacity falls sufficiently low. The voltage is set to deliver maximum current for the necessary period of time that minimizes undue stress to the battery caused by heating of its cells. This helps to ensure the longest possible life of the battery. Over time, as the battery nears full capacity, the unit will float-charge the battery to prevent self-discharge of its cells.

TECHNICAL SPECIFICATIONS

DC Output Voltage (No Load) approx.	27.2V (DC)
Output Voltage Tolerance (No Load)	+ or - .5%
Output Amperage, Max Continuous	40 Amps
Output Voltage (Full Load) approx.	>27.0V (DC)
Maximum Power Output, Continuous	1100 Watts
Ripple and Noise	<100 mV rms
Input Voltage Range (AC)	108 - 264 AC
Input Voltage Frequency	47-63 Hz
Maximum AC Current (@ 120VAC)	11.5 Amps
Power Factor (@ Full Load)	>90%
Typical Efficiency	80%
Max Inrush Current, Single Cycle	75 Amps
Short Circuit Protection	Yes
Overload Protection	>100%
Line Regulation	100 mV rms
Load Regulation	<1%
Fan Control*	PROPORTIONAL
Thermal Protection	YES
Working Temperature Range	0° - 40° C
Storage Temperature	-20° to 80° C
Withstand Voltage (VDC)**	1700/1700/500
Dimensions†	13" x 8.3" x 3.4" (330mm x 211mm x 86mm)
Weight	9 lbs (4.08kg)
Input Cord††	IEC C-14

*Proportional = Fan speed proportional to case temperature.
 **Primary to Chassis/Primary to Secondary/Secondary to Chassis
 †See reverse side for detailed mounting specifications.
 ††Requires country-specific C-13 cord (not supplied).

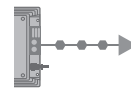
FEATURES



Power Factor Correction provides more efficient utility consumption and allows for operation from a 15A circuit.



Universal Input accepts AC voltage from 120 to 240 VAC.



Clean and steady DC Output operates your loads the way they were intended, avoiding potential damage to systems from errant DC voltage.



Built-in protection features guard the unit against erratic line voltage that can occur from shore power or generator supplies.



Reverse Polarity Protection to protect against damage from incorrect battery hook-up, using readily available fuse types that are easy to replace.



Proportional fan control for whisper-quiet operation.

ADDITIONAL FEATURES INCLUDE...

- Switch-mode technology
- Current limit, thermal and overload protection
- Lower operating temperature
- Charging Jack option for normal and high-stage battery charging applications
- IEC Input Plug allows connection to all global connection types.



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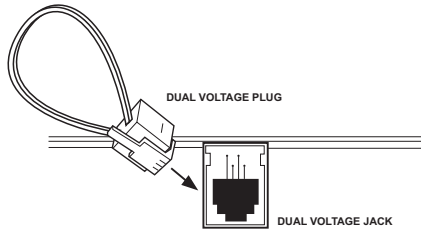
DLS-UI-27-40

27VDC 40A Power Factor Corrected Converter

DUAL VOLTAGE JACK

The **DLS-UI-27-40** is equipped with a Dual Voltage Jack and Dual Voltage Plug that allows manual switching from a long-term float voltage of 27.2vdc to 28.4vdc. When the Dual Voltage Plug is inserted in the jack, the voltage increases to 28.4vdc for occasional fast charging. When the plug is removed, the voltage drops to 27.2vdc to reduce battery water loss.

The Dual Voltage Jack also allows for easy installation of an external IQ4 Smart Charger for automatic 4-stage charging (optional). If the unit is equipped with an internal IQ4 smart charger, two-step charging is not needed and the Dual Voltage Jack is disabled. For details on 4-stage charging, refer to the IQ4 instruction manual.



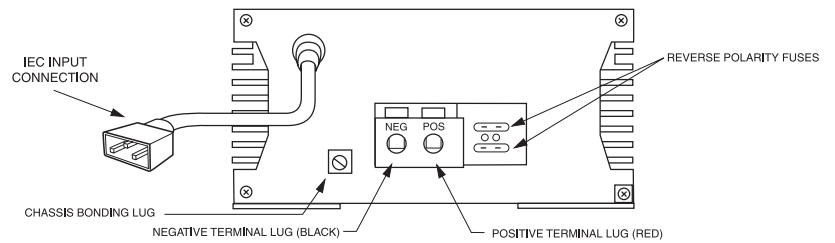
WARRANTY

IOTA DLS Power Products are warranted from defects in materials or workmanship for two years from date of retail purchase, and limits the remedies to repair or replacement. This warranty is valid only in the continental United States and Canada. For complete warranty details, contact Customer Service or visit www.iotaengineering.com

INSTALLATION OVERVIEW

Connect the positive (red) and negative (black) terminal lugs to battery or load (Disconnect POS side of battery if present before making DLS connections). Always use the proper size wire based on the amperage of the converter and the load. When connecting to a battery, a breaker should be installed within 18" of the battery, connecting the battery positive to the line side of the breaker, and the DLS to the load side. Connect "Chassis Bonding Lug" on the DLS to vehicle chassis or other grounding source.

The unit features a cord with a three-prong IEC receptacle for connection to a properly rated C-13 input cord which connects to the 108-240VAC supply (not supplied).



DIMENSIONS

